



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

**APPELLANT'S MAIN BRIEF ON APPEAL**

APPLICANT: Stefan ASCHOFF, et al. DOCKET NO: P03,0378  
SERIAL NO.: 10/669,075 ART UNIT: 2182  
FILED: September 23, 2004 EXAMINER: Park, Ilwoo  
CONF. NO.: 2710  
TITLE: INTERFACE DEVICE FOR AUDIOLOGICAL DEVICES AND  
CORRESPONDING METHOD TO EXCHANGE DATA

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Commissioner for Patents  
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08/15/2006 CNEGA1 00000014 10669075  
01 FC:1402 500.00 0P

Sir:

In accordance with the provisions of 37 C.F.R. §41.37, Appellant submits  
15 this Brief in support of the appeal of the above-referenced application in support  
of the patentability of claims 1-16 finally rejected in the Final Office Action (FOA),  
dated January 17, 2006. A copy of the claims on appeal is attached as Appendix  
A. A Notice of Appeal was filed on June 9, 2006.

**REAL PARTY IN INTEREST**

20 The real party in interest in this appeal is the assignee, Siemens  
Aktiengesellschaft, a German corporation, by virtue of the Assignment recorded  
January 16, 2004 at reel/frame 014887/0870.

**RELATED APPEALS AND INTERFERENCES**

There are no related appeals and no related interferences known to  
25 Appellant, Appellant's Assignee, or Appellant's legal representative.

**STATUS OF CLAIMS**

Claims 1-16 are on appeal, and constitute all pending claims of the  
application.

The status of the claims is as follows: claims 1-16 are rejected as being anticipated by Eaton, et al. U.S. patent application publication no. 2005/0283263 A1.

### **STATUS OF AMENDMENTS**

5 Amendment A, filed November 9, 2005, was entered by the Examiner and served as the basis for the Final Office Action.

### **SUMMARY OF THE CLAIMED SUBJECT MATTER**

The use of page and line numbers and reference characters in the  
10 drawings is provided by way of example and is in no way intended to limit the claimed subject matter unless expressly indicated.

In general terms, and referring primarily to Figures 3 and 4, the present invention is directed to an interface device (69) (and appertaining method) for audiological devices (1, 4, 5) between a plurality of audiological applications (11, 15 14, 15) and at least one audiological data administration system (71, 72, 73), comprising: an audiological application access device (86) to which the plurality of audiological applications for controlling audiological hardware components can be connected for uniform data exchange, an audiological data administration connection device (82) to which at least one audiological data administration  
20 system (71, 72, 73) can be connected, and a converter device (84), that closes a connection between the audiological application access device (86) and the audiological data administration connection device (82), the converter device (84) being configured to perform at least one of: a) converting respectively specific audiological application data acquired by the audiological application access  
25 device (86) in a predeterminable databank format for the plurality of audiological applications, and b) converting databank audiological data acquired from the audiological data administration connection device (82) into one or more respectively specific application formats for the plurality of audiological applications (11, 14, 15).

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## GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The issue on appeal is whether the subject matter of claims 1-16 is anticipated under 35 U.S.C. §102(e) by U.S. Patent Publication No. 2005 / 0283263 A1 to Eaton, et al. (Eaton).

## ARGUMENT

### ***ARGUMENT 1—Anticipation by Eaton***

***Examiner's Position: Eaton teaches each and every element of claims 1-16 and therefore is an anticipating reference.***

10 In considering claims 1 and 8 in the FOA, on pp. 2-3, the Examiner provided the following discussion as to how Eaton reads on the elements of these claims

15 As to claims 1 and 8, Eaton et al teach an interface device [device 106 in fig. 1] for audiological devices [e.g., hearing aid system 102 in fig. 1] between a plurality [sic] audiological of applications [paragraph 0010] and at least one audiological data administration system [e.g., server in paragraph 0040], comprising:

20 an audiological application access device [paragraph 0034] to which the plurality of audiological applications for controlling hardware components can be connected for uniform data exchange,

25 an audiological data administration connection device [paragraph 0037] to which at least one audiological data administration system can be connected, and

30 a converter device [paragraph 0041], that closes a connection between the audiological application access device and the data administration connection device, the converter device being configured to perform at least one of: a) converting [aural responses formatted to form an audiogram before sending to the server in paragraph 0053] respectively specific audiological application data acquired by the

35 audiological application access device in a predeterminable databank format for the plurality of audiological applications, and b) converting databank audiological data acquired from the audiological data administration connection device into one or more

respectively specific application formats for the plurality of audiological applications.

The Appellants filed Response C and Request for Reconsideration,  
5 presenting numerous points of distinction between the claimed invention and Eaton. In response, the Examiner responded in the Advisory Action, mailed May 19, 2006, with the response that Response C:

10 does NOT place the application in condition for allowance because: the examiner respectfully disagrees with applicants' arguments including "converting into a format chosen from a plurality of formats", which are not in the claims.

***Appellant's Position: Claims 1-16 of the present application are not taught or suggested by Eaton, and the Examiner has failed to establish how the***  
15 ***claim elements are taught by Eaton, as required of an anticipating reference.***

The last element of independent claims 1, 8, and 16 require a converter device (or converting process for method claim 8), that generally (as provided in  
20 claim 1):

25 closes a connection between the audiological application access device and the audiological data administration connection device, the converter device being configured to perform at least one of: a) converting respectively specific audiological application data acquired by the audiological application access device in a predeterminable databank format for the plurality of audiological applications, and b) converting databank audiological  
30 data acquired from the audiological data administration connection device into one or more respectively specific application formats for the plurality of audiological applications.

In other words, the converter device that closes the connection must  
35 perform one of the functions specified by (a) or (b). The converter device thus provides the capability of (a) converting data received from the plurality of audiological applications into a predetermined databank format—in simplified terms, the converter device acts as a translator, translating the information from

an “audiological application” format into a “predetermined databank” format. In (b), the converter device does just the opposite—it serves as a translator translating the information from the “predetermined databank” format into the “audiological application” format. By having this converter device, the interface  
5 between the various audiological applications and the data administration for relevant data is greatly simplified.

The Examiner has cited to paragraph [0041] of Eaton as disclosing the converter device as described by this last element. Paragraph [0041] of Eaton states:

10           In one embodiment, these distributed applications, such as a Java applet, are adapted to move from the server 116 to the device 106 to execute on the device 106. In another embodiment, once a distributed  
15           application is executed on the device 106, the device 106 may interact with the hearing aid system 102 through the user interface provided by the distributed application. In yet another embodiment, the distributed application when moved to the device 106 would  
20           dynamically plug into existing software that includes a user interface already on the mobile device.

Although the Examiner has not provided any clarification, it is presumed that the intent is that the converter device is being interpreted as Eaton’s device 106, which comprises Java applets that have been downloaded from the server 116. This would also be consistent with the Examiner’s presumed interpretation  
25 of Eaton’s short range network 104 reading on the audiological application access device according to the first element of claim 1 (FOA, p. 2, the Examiner citing to paragraph [0034] of Eaton) and Eaton’s long range network 110 reading on the audiological data administration connection device according to the second element of claim 1 (FOA, p. 2, the Examiner citing to paragraph [0037] of  
30 Eaton). With the Examiner’s presumed interpretations, Figure 1 of Eaton would indicate that device 106 closes a connection between Eaton’s long range network 110 and short range network 104.

However, this interpretation is problematic, as element (a) requires converting respectively specific audiological application data acquired by the

audiological application access device in a predeterminable databank format for the plurality of audiological applications. The system of Eaton talks about different audiological applications, but refers to them in different embodiments.

Eaton discloses a hearing aid system with a mobile device adapted to  
5 communicate with a remote server and with a listening device to transfer data from the server to the listening device and vice versa. In a special embodiment the mobile device can also compress and decompress digital audio signals. Thus, in one embodiment, the mobile device of Eaton just serves as relay station or amplifier without intelligence for communication streams and appertaining  
10 formatting. In another embodiment, the mobile device taught by Eaton is adapted to convert data (aural responses), into one predetermined audiogram format and for one audiological application. This is a significant difference compared to the interface device as claimed in the independent claims.

Importantly, the mobile device Eaton teaches interaction with different  
15 applications only in different embodiments, and therefore the mobile device of Eaton is not configured to perform the claimed "converting databank data acquired from the data administration connection device into one or more respectively specific application formats for the plurality of applications". Particularly in paragraph [0053] of Eaton, the variations are discussed as different  
20 embodiments. The present converter, as claimed in the independent claims, is thus substantially more flexible than that as taught by Eaton, since it can convert into several formats within one embodiment.

The Examiner cites to Eaton's paragraph [0010] as disclosing the plurality of audiological applications as taught by the present invention; however, the  
25 section of Eaton cited by the Examiner only discloses one application here: the aural response of a patent for audiological therapy. Eaton's paragraph [0034] cited by the Examiner for the first element of claim 1 is completely silent with respect to the plurality of audiological applications as required by this claim element. This is true for Eaton's paragraph [0037] cited by the Examiner for the  
30 second element of claim 1. Note that Eaton's paragraphs [0034] and [0037] do discuss a plurality of protocols that can be used for the respective short-range

and long-range communications, but this clearly cannot be read on the plurality of audiological applications as claimed in the present independent claims. Similarly, the Examiner's recitation of Eaton's paragraph [0048] (with respect to claims 2, 4, 9 and 11) only teaches one application related to an aural response.

5           With respect to the last element of claim 1, the Examiner cites Eaton's paragraph [0041] which, although disclosing a plurality of applications, deals with the mechanisms for movement and use of these applications themselves and not with a conversion of application data into particular formats as required by this claim element.

10           Furthermore, with respect to the additional dependent claims, various paragraphs of Eaton are discussed as to the plurality of applications (paragraphs [0051], [0053], [0055]), however, as noted previously, these related to separate independent embodiments (i.e., different applications in different separate embodiments") and therefore Eaton fails to teach or suggest the invention  
15 claimed by the present application.

For the above reasons, Appellants respectfully contend that the present invention is not anticipated by Eaton.


### CONCLUSION

For the above reasons, Appellants respectfully submits that the Examiner  
20 is in error in law and in fact in rejecting claims 1-16 based on the teachings of the above-discussed reference. Reversal of the rejection of all of those claims is justified, and the same is respectfully requested.

This Brief is accompanied by a check in the amount of \$500.00, as required by 37 C.F.R. §41.20(b)(2). If necessary, the Commissioner is hereby  
25 authorized to charge any additional fees which may be required to account No. 501519.

Respectfully submitted,

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**CERTIFICATE OF MAILING**

10 I hereby certify that I have caused an original of this correspondence to be deposited with the United States Postal Service as First Class mail in an envelope addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450 on August 9, 2006

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A handwritten signature in black ink, appearing to read "Pam Vanda", is written over a horizontal line.





## **APPENDIX A CLAIMS INVOLVED IN THE APPEAL**

1. (previously presented) An interface device for audiological devices between a  
5 plurality of audiological applications and at least one audiological data  
administration system, comprising:
  - an audiological application access device to which the plurality of  
audiological applications for controlling audiological hardware  
components can be connected for uniform data exchange,
  - 10 an audiological data administration connection device to which at least one  
audiological data administration system can be connected, and
  - a converter device, that closes a connection between the audiological  
application access device and the audiological data administration  
connection device, the converter device being configured to perform  
15 at least one of: a) converting respectively specific audiological  
application data acquired by the audiological application access  
device in a predeterminable databank format for the plurality of  
audiological applications, and b) converting databank audiological  
data acquired from the audiological data administration connection  
20 device into one or more respectively specific application formats for  
the plurality of audiological applications.
2. (previously presented) The device according to claim 1, further comprising a  
class library that is accessible with each of the plurality of audiological  
25 applications.
3. (previously presented) The device according to claim 1, further comprising a  
state administration device for the plurality of audiological applications, such that  
the plurality of audiological applications have common access to predeterminable  
30 data.

4. (previously presented) The device according to claim 3, further comprising a databank in which states and data of the plurality of audiological applications can be stored for common access via the state administration device.

5

5. (previously presented) The device according to claim 3, wherein the state administration device is configured to automatically recognize which audiological data administration system or systems are connected to the device.

10 6. (previously presented) The device according to claim 1, further comprising a data keeping device to keep data for a plurality of the audiological applications .

7. (original) The device according to claim 6, wherein the data keeping device comprises a volatile storage.

15

8. (previously presented) A method for data exchange for audiological devices between a plurality of audiological applications and at least one audiological data administration system, comprising:

20 uniformly exchanging data comprising audiological application data with the plurality of audiological applications via an interface device;

exchanging audiological data stored in a databank with at least one audiological data administration system via the interface device;  
and

at least one of:

25 a) converting audiological application data respectively specific to the plurality of audiological applications into a predeterminable databank format for the at least one audiological data administration system; and

b) converting databank audiological data acquired into one or more application formats respectively specific to the plurality of audiological applications.

5 9. (previously presented) The method according to claim 8, further comprising enabling the uniform data exchange by a class library to which each of the plurality of audiological applications is accessed.

10 10. (previously presented) The method according to claim 8, further comprising providing the plurality of audiological applications with mutual access to the predeterminable data.

11. (previously presented) The method according to claim 10, further comprising storing states and data of the plurality of audiological applications in a databank  
15 for common access.

12. (previously presented) The method according to claim 8, further comprising automatically recognizing which of the audiological data administration system or systems is connected.

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13. (previously presented) The method according to claim 8, further comprising holding audiological data internal to the interface device for the plurality of the audiological applications.

25 14. (previously presented) The method according to claim 13, wherein the holding of the audiological data is done in a volatile memory.

15. (previously presented) The method according to claim 8, further comprising:

acquiring audiological data by measuring a patient's hearing with an  
audiometer;

programming a hearing device by a programming device utilizing the  
acquired audiological data from the audiometer; and

5 checking the hearing device functionality according to a predefined criteria  
with a test box;

wherein the audiological applications and audiological data are related to  
the hearing device, the audiometer, the programming device, and  
the test box.

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16. (previously presented) A system for programming and testing hearing  
devices comprising:

an audiometer that acquires audiological data from a patient;

a hearing device designed to be worn by the patient;

15 a programming device for programming the hearing device utilizing the  
audiological data from the patient;

a test box that checks the hearing device functionality according to a  
predetermined criteria; and

20 an interface device for audiological devices, the audiological devices  
comprising the audiometer, the hearing device, the programming  
device and the test box, between a plurality of audiological  
applications and at least one audiological data administration  
system, comprising:

25 an audiological application access device to which the plurality of  
audiological applications for controlling audiological  
hardware components can be connected for uniform data  
exchange,

a an audiological data administration connection device to which at least one audiological data administration system can be connected, and

5 a converter device, that closes a connection between the audiological application access device and the audiological data administration connection device, the converter device being configured to perform at least one of: a) converting respectively specific audiological application data acquired by the audiological application access device in a  
10 predeterminable databank format for the plurality of audiological applications, and b) converting databank audiological data acquired from the audiological data administration connection device into one or more respectively specific application formats for the plurality of  
15 audiological applications.



## **APPENDIX B EVIDENCE APPENDIX**

There is no additional evidence entered and relied upon for this appeal.

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## **APPENDIX C RELATED PROCEEDINGS APPENDIX**

There are no related proceedings associated with this appeal